

Response dated June 25, 2007

Reply to Restriction Requirement of April 24, 2007

REMARKS

Restriction Requirement

The examiner has restricted the claims ten ways (Groups numbered I-VI and VIII-XI).

Applicants respectfully traverse this Restriction. To be responsive, Applicants elect with traverse Group I and further select with traverse quartz as the species of insoluble support. New Claim 88 is presented as a linking claim for Groups I-IV and V-VIII.

Applicants traverse the restriction, asserting the PCT Unity of Invention standard has not been properly applied to the pending claims. Unity of Invention requires that the claims be generally related to the same inventive concept.

Applicants assert Groups I, II, V, and VI, as well as new claim 88 are each linked to the general inventive concept of coupling a disulfide bridge-containing peptide or protein to a carrier, which carrier may be soluble (Groups V, VI) or insoluble (Groups I, II) via a thiol group generated by irradiating the peptide or protein. The Examiner's attention is drawn to the method steps of independent claim 30 (Group I) and independent claim 60 (Group V). The method steps are identical, and the claims differ only in the type of carrier to which the protein or peptide is coupled.

Independent claim 30 (Group II) and independent claim 69 (Group VI) are not drawn to "another" carrier as suggested by the Examiner, but further limit claims 30 and 60 respectively, requiring the irradiating step to be conducted at a wavelength that specifically excites an aromatic amino acid identified as a spatial neighbor of the disulfide bridge in the peptide or protein, thereby transferring energy from the excited aromatic amino acid to disrupt the disulfide bridge. Accordingly, Group II claims should be rejoined with Group I and Group VI claims rejoined with Group V.

Applicants maintain Groups I, II, V, and VI, as well as new claim 88 are each related to the same general inventive concept and differ in the choice of carrier. Applicants assert these

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claims should be rejoined, and an election of species made for examination of an elected species of carrier. On determination of species as allowable subject matter, additional species should be searched. Claims 56 (Groups III, IV) and 83 (Groups VIII and IX) are drawn to methods using the carriers produced by the claimed method of Group I and Group V, respectively, and are thus also linked by the same inventive concept, and should be rejoined.

Applicants respectfully assert the pending restriction requirement is contrary to PCT Rule 13.1 and must be removed. Applicants suggest a more appropriate restriction is that applied by the PCT, between claims 30-85 (and new claim 88] (alternative Group I) and claims 80-87 (alternative Group II). As discussed above, claims 30-85 and 88 are each linked to the general inventive concept of coupling a disulfide bridge-containing peptide or protein to a carrier via a thiol group generated by irradiating the peptide or protein (Groups I-VI and VIII-IX), and differ in choice of carrier. Should the Examiner maintain the improper restriction, Applicants assert new claim 88 as a linking claim linking Group I with Groups II-VI and VIII-IX. Claims 86-87 are drawn to a method of using the method of claims 30-85 and 88 (alternative Group I) to predict whether a protein or peptide is capable of being disrupted according to the claimed method.

In view of the above Amendments and Remarks, Applicants respectfully request entry of the claim Amendments and removal of the Restriction Requirement as contrary to PCT Rule 13.1. An alternative restriction in keeping with PCT Rule 13.1 into two alternative groups, coupled with an election of species request is respectfully requested.

U.S. Patent Application Serial No. 10/542,159

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If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number

Respectfully submitted,

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